



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
-----------------	-------------	----------------------	---------------------	------------------

10/500,874

07/07/2004

Serge Haumont

60091.00329

1172

32294 7590 03/12/2007  
SQUIRE, SANDERS & DEMPSEY L.L.P.  
14TH FLOOR  
8000 TOWERS CRESCENT  
TYSONS CORNER, VA 22182

EXAMINER

KHAN, IBRAHIM A

ART UNIT

PAPER NUMBER

2617

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
--	-----------	---------------

3 MONTHS

03/12/2007

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

**Office Action Summary**

Application No.

10/500,874

Applicant(s)

HAUMONT, SERGE

Examiner

Ibrahim A. Khan

Art Unit

2617

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 07/07/2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-18 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-18 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 07/07/2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_

## DETAILED ACTION

### *Information Disclosure Statement*

1. The information disclosure statements submitted on 07/07/2004 and 01/10/2007 have been considered by the Examiner and made of record in the application file.

### *Claim Rejections - 35 USC § 102*

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 1-18 are rejected under 35 U.S.C. 102(e) as being anticipated by **Still et al. (US 20020128028)**.

Consider **claim 1**, Still clearly discloses a method for selecting a gateway network node for a mobile station served by a serving network node, in a system where at least two network operators may share a radio network and the serving network node, the system comprising at least two gateway network nodes (*see abstract, figure 2, page 1 paragraph 0006 and 0007*), the method comprising

maintaining partner information about predefined partner networks, the partner information indicating that said network operators share the serving network node (*see figure 2, page 1 paragraphs 0006-0008, page 2 paragraphs 0021 where Stille discloses that route outgoing packets through the correct home network. In order for this to occur the information about the partner must be maintained*) ; and

selecting a gateway network node for the mobile station on the basis of the partner information (*see page 1 paragraphs 0011, page 2 paragraph 0021-0027 where Stille still discloses that route outgoing packets through the correct home network*); and

Consider **claim 5**, Stille discloses a mobile communications system comprising at least one mobile station (*abstract, figure 2*);

a subscriber register for maintaining subscriber information of the mobile station (*figure 2, page 1 paragraph 0006, page 2 paragraph 0021 where Stille discloses an HLR that stores subscriber information*);

at least two networks to which the mobile station may connect when it is within the area of the network, one of the networks being the home network of the mobile station, the networks comprising at least one gateway network node for interaction between packet switched mobile networks and external data networks (*figure 2, page 1 paragraph 0006 and 0007, page 2 paragraph 0021 where Stille discloses two separate GGSN served by the same SGSN*);

and at least one serving network node for serving the mobile station while the mobile station is in the area of the serving network node, wherein the system is configured to maintain partner information about networks that are predefined partner networks of the home network,

Art Unit: 2617

the home network sharing at least one serving gateway node with each of the predefined partner networks (*figure 2, page 1 paragraph 0006 and 000 , page 2 paragraph 0021-0027 where Stille discloses storing partner information of the networks that are sharing the SGSN*); and to

select the gateway network node by utilizing the partner information (*paragraph page 2 paragraph 0021-0027 where Stille discloses selecting the correct GGSN based on the stored partner information*) .

Consider **claim 15**, Stille discloses a subscriber register for maintaining subscriber information in a system comprising

at least one mobile station (*see figure 2*), at least two networks to which the mobile station may connect when it is within the area of the network , one of the networks being the home network of the mobile station, the networks comprising at least one gateway network node for interaction between packet switched mobile networks and external data networks (*see figure 2, page 1 paragraphs 0006 and 0007, page 2 paragraph 0021 and 0022*); and

at least one serving network node for serving the mobile station while the mobile station is in the area of the serving network node(*see figure 2, page 2 paragraphs 0021 and 0022*),

the subscriber register comprising a first routine for maintaining partner information about networks that are predefined partner networks of the network, the partner network and the home network sharing at least one serving gateway node ( *see page 2 paragraph 0021-0027, page 3 paragraph 0028-0029*);

a second routine for checking the partner information of the mobile station ( *see page 2 paragraph 0021-0027, page 3 paragraph 0028-0029*);

Art Unit: 2617

; and

a third routine for indicating, on the basis of the partner information, the gateway network node, to which the mobile station is to be connected, to the serving network node serving the mobile station (*see page 2 paragraph 0021-0027, page 3 paragraph 0028-0029*);

Note that the IMSI information, which contains partner information is stored on the Subscriber Identity SIM of the mobile terminal. It is apparent to those skilled in the art that HLRs have SIM records which contain various subscriber services and current location information)

Consider **claim 16**, Stille discloses a serving network node for relaying packet switched data in a system (*abstract, figure 2*) comprising

at least one mobile station (*figure 2*);

a subscriber register for maintaining subscriber information of the mobile station networks (*see figure 2, page 1 paragraphs 0006 and 0007, page 2 paragraph 0021 and 0022 where Stille discloses an HLR that stores subscriber information*); and

at least two networks to which the mobile station may connect when it is within the area of the network, one of the networks being the home network of the mobile station, the networks comprising at least one gateway network node for interaction between packet switched mobile networks and external data networks (*figure 2, page 1 paragraph 0006 and 0007, page 2 paragraph 0021 where Stille discloses two separate GGSN served by the same SGSN*);

the serving network node comprising a first routine for checking partner information about networks that are predefined partner networks of the network, the partner network and the

Art Unit: 2617

home network sharing the serving gateway node (information (*see page 1 paragraphs 0011, page 2 paragraph 0021-0027*); and a

second routine for selecting a gateway network node on the basis of the partner information (*see page 1 paragraphs 0011, page 2 paragraph 0021-0027 where Stille still discloses that route outgoing packets through the correct home network*); and.

Consider **claim 2** and as applied to claim 1 above, Stille discloses that the partner information comprises direct or indirect indications of the network in which the mobile station is located and of the home network of the mobile station (*see page 1 paragraphs 0006 and 0007, page 2 paragraph 0021-0027*).

Consider **claim 3** and as applied to claim 1 above, Stille discloses that the selection step of the method comprises the steps of checking on the basis of the partner information whether a mobile station is in the home network, in a predefined partner network of the home network, or in a network outside them; and selecting the gateway network node of the home network if the mobile station is in its home network; selecting the gateway network node of the home network if the mobile station is in a predefined partner network of the home network; or selecting the gateway network node of a visited network if the mobile station is outside its home network or predefined partner mobile networks of its home network (*page 2 paragraph 0021-0027*).

Consider **claim 4** and as applied to claim 1 above, Stille discloses checking on the basis of the partner information whether the mobile station is in a network that is a predefined partner

Art Unit: 2617

network of the one belonging to its home network operator and selecting the gateway network node of a visited network if the mobile station is in a network that is a predefined partner network of the one belonging to its home network operator (*page 2 paragraph 0021-0027, page 3 paragraphs 0028-0029*).

Consider **claim 6** and as applied to claim 5 above, Stille discloses that the partner information is maintained in the serving network node to indicate the networks sharing the serving network node (*page 2 paragraph 0021 and 0022*).

Consider **claim 7** and as applied to claim 6 above, Stille discloses that the serving network node is configured to compare the MNC/MCC code of the mobile station, in connection with the context activation of the mobile station, with APN operator identifiers stored for each network operator sharing the serving network node, said MNC/MCC code indicating explicitly the home network of the mobile station and said APN operator identifier indicating implicitly the partner information (*page 2 paragraph 0021 -0027*).

Consider **claim 8** and as applied to claim 5 above, Stille discloses that the serving network node is also configured to connect a mobile station located in a mobile network that is a predefined partner network of its home network to the gateway network node of the home network (*page 2 paragraph 0027, page 3 paragraph 0028 and 0028*).



Consider **claim 9** and as applied to claim 5 above, Stille disclose wherein the partner information is maintained in a subscriber register (*page 2 paragraph 0021*).

Consider **claim 10** and as applied to claim 9 above, Stille disclose wherein the subscriber register is configured to check the partner information in connection with the location update of the mobile station; set the value of a "Visitor-PLMN address allowed"-flag to 'No' if the mobile station is in a predefined partner network of the home network and indicate the value of the flag to the serving network node (*page 2 paragraph 0021 –0027, page 3 paragraph 0028 and 0029*).

Consider **claim 11** and as applied to claim 5 above, Stille disclose wherein the serving network node is also configured to connect the mobile station located in a predefined partner network of its home network to the gateway network node of the home network (*page 2 paragraph 0021 -0027*).

Consider **claim 12** and as applied to claim 5 above, Still discloses wherein the subscriber register is configured to check the partner information in connection with the location update of the mobile station, the partner information comprising at least one network belonging to the home network operator; set value of the "Visitor-PLMN address allowed"-flag to 'Yes' if the mobile station is located in a network that is a predefined partner network of the one belonging to its home network operator and indicate the value of the flag to the serving network node (*page 2 paragraph 0021 –0027, page 3 paragraph 0028 and 0029*).

Consider **claim 13** and as applied to claim 5 above, Stille discloses wherein the serving network node is also configured to connect the mobile station located in a predefined partner network of the one belonging to its home network operator to the gateway network node of the visited network on the basis of the partner information, the partner information comprising at least one network belonging to the home network operator (*page 2 paragraph 0021 -0027*).

Consider **claim 14** and as applied to claim 9 above, Stille discloses wherein the subscriber register is configured to compare the MNC/MCC code of the mobile station with APN operator identifiers stored for each network operator sharing the network in connection with the location update of the mobile station and indicate the result of the comparison to the serving network node (*page 2 paragraph 0021 -0027*).

Consider **claim 17** and as applied to claim 16 above, Stille discloses a third routine for maintaining partner information *page 2 paragraph 0021 -0027*).

Consider **claim 18** and as applied to claim 16 above, Stille discloses that it is the SGSN of a GPRS network (*see figure 2, page 2 paragraph 0021*).

### ***Conclusion***

3. Any response to this Office Action should be **faxed to (571) 273-8300 or mailed to:**

Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

**Hand-delivered responses** should be brought to

Customer Service Window  
Randolph Building  
401 Dulany Street  
Alexandria, VA 22314

4. Any inquiry concerning this communication or earlier communications from the Examiner should be directed to Ibrahim A. Khan whose telephone number is (571) 270-1110. The Examiner can normally be reached on Monday-Friday from 8:00am to 5:00pm.

If attempts to reach the Examiner by telephone are unsuccessful, the Examiner's supervisor, Nick Corsaro can be reached on (571) 272-7876. The fax phone number for the organization where this application or proceeding is assigned is (571) 273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free) or 703-305-3028.

Art Unit: 2617

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist/customer service whose telephone number is (571) 272-2600.

*Ibrahim A. Khan*

I.A.K./iak

03/03/2007

  
NICK CORSARO  
SUPERVISORY PATENT EXAMINER  
TECHNOLOGY CENTER 2600